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ON THE VALUE
OF A
LOTION OF SULPHIDE OF ZINC
IN THE TREATMENT OF
SUPERFICIAL LUPUS ERYTHEMATOSUS.

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ON THE VALUE OF A LOTION OF SULPHIDE
OF ZINC IN THE TREATMENT OF SUPER-
FICIAL LUPUS ERYTHEMATOSUS.¹

I DESIRE to direct attention to the value of a certain zinc sulphide lotion in the treatment of some forms of lupus erythematosus. It may here be stated that I have found it useful in what may be termed the inflammatory superficial form of the disease, occurring either in discrete or in confluent patches of recent or of long duration. Where the morbid process has settled deeper in the cutaneous structures, and where there is but little tendency to variation from month to month, other more stimulating remedies will prove more serviceable. Every practitioner has doubtless encountered instances of this disease in which the usual, for the most part stimulating, remedies have been of no value. In the majority of these cases they will be found to be positively injurious, inflaming the skin, and causing the diseased areas to spread. Such has been my experience. Any new remedy or formula, there-

¹ Read before the American Dermatological Association, at the Seventh Annual Meeting, August 29, 1883.



fore, which for these peculiar cases offers hope of relief, must prove welcome to both patient and physician. The striking good which has followed the use of this remedy in several cases that have recently been under my care induces me to present this note. I do not wish to claim for it any specific power over the disease, nor to say that it will cure. I merely wish to speak of it as a highly useful remedy, which in some cases has proved the only application that has at all benefited the disease. I was first led to prescribe it because of the service it had rendered in the treatment of seborrhœa of the face.

The lotion consists of equal parts of sulphate of zinc and sulphuret of potash, in the strength of from five to fifteen grains each to the ounce of water, together with the addition of a variable quantity of alcohol. Ether may also often be added with benefit. I am in the habit of using the following formula: Take of sulphate of zinc and sulphuret of potash each thirty grains; rose-water, three fluid-ounces and a half; alcohol, three fluidrachms. If this strength agree with the skin, the two active ingredients may be increased to the amount of a drachm each to four ounces of the fluid. More alcohol may also be used, to the extent of one ounce to three of water. A few minims of glycerine to the ounce may sometimes be added with advantage. The lotion, which contains a light-grayish, pulverulent sediment, should be shaken before using, and applied lightly to the part for

from five to twenty minutes by means of a sponge or a rag mop, allowing the sediment to adhere to the surface. The immediate effect is usually cooling and soothing. The application may be repeated two or more times in the twenty-four hours. The skin should first be cleansed of scales by means of soap, the milder soaps sometimes proving more beneficial than the stronger soft soaps.

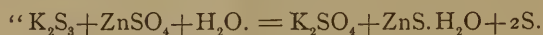
The following note by Dr. L. Wolff, pharmaceutical chemist, of Philadelphia, explains briefly the chemistry, as well as the best method of making the compound.

“When equal parts of zinc sulphate and potassium sulphide are mixed together in the presence of water, a double decomposition takes place, resulting in zinc sulphide, potassium sulphate, and precipitated sulphur. The zinc sulphide thus formed is a hydrate, and of a white, pulverulent appearance.

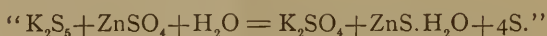
“When the two are to be combined in a lotion with water, they are best dissolved separately in half the prescribed quantity of water each, and then the two solutions poured together. When the liquid, however, consists of alcohol, or alcohol and ether, the two salts must be rubbed down fine first, whereupon a small quantity of water is added, just sufficient to allow the reaction to take place, which is known by the white appearance of the mass; the alcohol is then added, and lastly the ether.

“As there are five potassium sulphides, according to the quantity of sulphur in the combination, the results will vary as to the amount of precipitated

sulphur present. Of these sulphides, the trisulphide and the pentasulphide are the most common. The potassa sulphurata of the United States and British Pharmacopœias are, according to their composition, principally trisulphides, and if these are employed, two equivalents of sulphur will be formed, as shown in the following formula :



“Again, if potassium pentasulphide is employed, an excess of four equivalents of sulphur would be precipitated, as follows :



I shall now briefly refer to three cases in which the beneficial effects of the lotion were striking :

About a year ago, Mr. W., aged 45, presented himself to me, exhibiting six or eight dull-red, chronically inflamed, slightly scaly, irregularly rounded, ill-defined patches of lupus erythematosus. The lesions were the size of peas and small beans, and were scattered over the face. They had existed eight months, and were subject to considerable variation. The patient had, at different times, been under the influence of arsenic, mercury, and iodide of potassium, and locally had used mercurial ointments—all without benefit. I prescribed an ointment of precipitated sulphur, one drachm to the ounce, which in a few days caused heat, and increased redness. Subsequently, tar ointment; oil

of cade; liquor carbonis detergens; an ointment of calomel, thirty grains to the ounce; ointments of pyrogallic acid, thirty and sixty grains to the ounce; an ointment of iodoform; tincture of iodine, were all used, with the result that, in every instance, the disease was made worse. The zinc sulphide lotion was now ordered, and gave almost immediate relief, the skin, in the course of a few days, becoming paler and less scaly, accompanied by a decrease in the subjective symptoms. Improvement continued under the use of the remedy, but, as cure did not follow, other applications, including solution of chlorinated soda, acetic acid, lead and mercurial plaster, alcoholic solution of salicylic acid, carbolic acid, ether and rhigolene spray, and the use of the curette, were resorted to. All proved of not the least value, while many were injurious. The zinc sulphide lotion was the only remedy that in any degree favorably influenced the disease. Some of the lesions disappeared under its use, and all were benefited.

Another case, of the butterfly form of the disease, in a gentleman from Virginia, forty-six years of age, of two years' duration, who has lately been under treatment, was very markedly benefited by the remedy, other applications having previously failed to influence the disease favorably.

A third case may be mentioned, that of a man, aged 30, who was admitted to the clinic of the University of Pennsylvania a few months ago with an unusually extensive development of the disease of

five years' duration, involving the greater part of the face. The erythematous element was marked, there being but very little sebaceous glandular involvement.

In the course of a week, a remarkable change for the better took place under the lotion; in three weeks the improvement was even more decided, so much so that the patch was broken up here and there, and apparently sound skin was in some places beginning to show itself.